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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,857	11/12/2003	Matthew Ruhlen	60001.0258USC1	8645
7590 MERCHAND & GOULD P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			EXAMINER KANG, PAUL H	
			ART UNIT 2144	PAPER NUMBER
			MAIL DATE 04/03/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/712,857

**Applicant(s)**

RUHLEN, MATTHEW

**Examiner**

Paul H. Kang

**Art Unit**

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-70 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-70 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 2/29/08; 6/4/04  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 53-57, 58-62, 63-70 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims recite “a computer program product accessible to a computing system and encoding a computer program...” This limitation amount to software per se and therefore non-statutory subject matter. See MPEP 2106.01.
3. Claims 57, 62 and 70 recite the computer program product being a communications medium. In the specification, page 5, lines 2-4, applicants intend “communications medium” to include “propagated signal on a carrier wave.” This is non-statutory subject matter.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-56, 58-61, and 63-69 are rejected under 35 U.S.C. 102(b) as being anticipated by McNeely, US Patent Application No. US 2002/0069222 A1.

6. As to claims 1 and 63, McNeely teaches a method and computer program product for developing a first electronic resource for use within a network environment, the method comprising:

defining a plurality of instructions for rendering the first electronic resource for presentation to users (§§ 0030-0031);

declaring within the plurality of instructions a reference to a second electronic resource, wherein the reference comprises a link identifier associated with a network location for the second electronic resource (§§ 0010, 0032-0041); and

creating a reference file mapping the link identifier to a unique address corresponding to the network location on which the second electronic resource is stored, wherein the reference file is used by a server computer to abstract the unique address of the network location from the link identifier in order to prepare the first electronic resource for delivery to a client computer (§§ 0010, 0032-0041).

7. As to claims 2 and 64, McNeely teaches a method and computer program product wherein the creating act comprises:

incorporating into the reference file a plurality of link identifiers mapped to a plurality of unique addresses corresponding to network locations on which a plurality of electronic resources referenced within at least one other electronic resource maintained within the network environment are stored, wherein the second electronic resource is one of the plurality of electronic resources and the unique address of the network location for the second electronic resource is one of the plurality of unique addresses (§§ 0030-0041).

8. As to claims 3 and 65, McNeely teaches a method and computer program product further comprising:

compiling the reference file to render an index file and an associated data structure, wherein the index file relates each of the plurality of link identifiers to an entry of address information contained in the associated data structure, wherein the entries of address information each specify a unique address within the network environment where each of the electronic resources are stored, the index file and the associated data structure being in a format readable by the server computer for use in abstracting the unique address of the network location from the link identifier (§§ 0030-0041).

9. As to claims 4 and 66, McNeely teaches a method and computer program product wherein each of the plurality of unique addresses comprises a service class identifying one of a plurality of server computers addressed by one of a plurality of domain names in the network environment (§ 0030).

10. As to claims 5 and 67, McNeely teaches a method and computer program product wherein each of the plurality of unique addresses further comprises a directory path corresponding to a specific location on one of the plurality of server computers addressed by one of a plurality of domain names in the network environment (§§ 0030-0040).

11. As to claims 6 and 68, McNeely teaches a method and computer program product wherein at least one of the plurality of unique addresses further comprises a query string of search parameters (§ 0030).

12. As to claims 7 and 69, McNeely teaches a method and computer program product wherein the reference file is in a format readable by the server computer (§ 0030-0031).

13. Claims 8-17 are a combination of claims 1-7, therefore claims 8-15 are rejected under the same rationale.

14. As to claims 18 and 58, McNeely teaches a method and computer program product for abstracting links to electronic resources in a network environment, the method comprising:

(a) retrieving from storage a first electronic resource, the first electronic resource comprising a reference to a second electronic resource within the network environment (§ 0010, 0030);

(b) examining the first electronic resource to locate a link tag corresponding to the reference, wherein the link tag comprises a link identifier associated with a network location for the second electronic resource and an executable routine for identifying a unique address for the network location (§ 0010, 0032-0041);

(c) in response to locating the link tag, executing the routine to identify the unique address (§ 0030-0041); and

(d) incorporating the identified unique address into the first electronic resource (§ 0041 ).

15. As to claims 19 and 59, McNeely teaches a method and computer program product wherein the retrieving act (a) is performed in response to receipt of a request for delivery of the first electronic resource to the client computer, the method further comprising:

(e) transmitting the first electronic resource with the identified unique address incorporated therein to the client computer (§¶ 0010, 0041-0042).

16. As to claims 20 and 60, McNeely teaches a method and computer program product wherein the incorporating act (d) comprises: replacing the link tag with a reference tag specifying the identified unique address (§¶ 0032-0041).

17. As to claims 21, McNeely teaches a method further comprising:

(e) defining an index comprising a plurality of link identifiers, wherein each of the plurality of link identifiers corresponds to an electronic resource maintained within the network environment (§¶ 0030-0035); and

(f) mapping each of the plurality of link identifiers defined in the index to an address information entry for use in identifying a unique address in the network environment where each of the electronic resources corresponding to one of the plurality of link identifiers is stored (§¶ 0030-0031, 0032-0041).

18. As to claim 22, McNeely teaches a method wherein the executing act (c) comprising  
(c)(1) extracting the link identifier from the link tag (§¶ 0035-0039); and

(c)(2) referencing the index with the extracted link identifier to locate the address information entry mapped to the extracted link identifier, wherein the located address information entry is used by the executed routine to identify the unique address specifying the storage location on which the second electronic resource is stored (§§ 0030-0031, 0032-0041).

19. As to claim 23, McNeely teaches a method wherein each of the unique addresses associated with one of the plurality of link identifiers comprises a first portion and a second portion, the first portion of each unique address being a particular domain name representing a server computer in the network environment on which electronic resources are stored and the second portion of each unique address being a directory path specifying a location on which a particular electronic resource is stored on the server computer corresponding to the domain name (§§ 0036-0040, 0045-0048).

20. As to claim 24, McNeely teaches a method wherein each address information entry comprises a service class identifying a particular server computer addressed by a particular domain name in the network environment, wherein the referencing act (c)(2) comprises:

referencing the index with the extracted link identifier to determine the service class mapped thereto and using the determined service class to identify the particular domain name corresponding to the first portion of the unique address of the second electronic resource (§§ 0030-0031, 0032-0041).



21. As to claim 25, McNeely teaches a method wherein each address information entry further comprises the directory path corresponding to a specific location on the particular server computer corresponding to the particular domain name, wherein the referencing act (c)(2) further comprises:

referencing the index with the extracted link identifier to determine the directory path mapped thereto and appending the directory path to the particular domain name identified as corresponding to the first portion of the unique address of the second electronic resource, thereby completing identification of the unique address of the second electronic resource (§§ 0030-0031).

22. As to claim 26, McNeely teaches a method wherein the defining act (e) comprises  
(e)(1) creating a link source file defining each of the plurality of link identifiers as being associated with an address information entry (§§ 0030-0031); and

(e)(2) compiling the link source file to yield the index and an associated data structure referenced by the index, wherein the associated data structure stores the service classes and the directory paths making up each address information entry in connection with an index pointer specified in the index for each of the plurality of link identifiers (§§ 0032-0041).

23. As to claim 27, McNeely teaches a method wherein at least one of the unique addresses further comprises a query string of search parameters (§ 0031).

24. As to claims 28 and 61, McNeely teaches a method and a computer program product wherein the examining, executing and incorporating acts are repeated for each link tag declared

in the first electronic resource (§§ 0010, 0030).

25. As to claims 29 and 53, McNeely teaches a method for preparing electronic resources for delivery to client computers in a network environment, the method comprising:

- (a) receiving a request for delivery of a first electronic resource to a first client computer (§ 0010);
- (b) retrieving from storage the first electronic resource (§§ 0030-0031);
- (c) examining the first electronic resource to determine whether the first electronic resource includes a link identifier corresponding to a second electronic resource being referenced as a link within the first electronic resource (§§ 0010, 0032-0041);
- (d) if a link identifier is detected within the first electronic resource, using the link identifier to identify a unique address specifying a storage location in the network environment on which the second electronic resource is stored (§§ 0010, 0032-0041);
- (e) incorporating the identified unique address into the first electronic resource to generate a prepared first electronic resource (§ 0041); and
- (f) transmitting the prepared first electronic resource to the first client computer to effectuate delivery of the electronic resource thereto (§§ 0010, 0032-0042).

26. As to claims 30 and 54, McNeely teaches a method and a computer program product wherein the link identifier is included within a link tag declared within the first electronic resource, the incorporating act (e) comprising:

replacing the link tag with a reference tag specifying the identified unique address (¶¶0032-0041).

27. As to claim 31, McNeely teaches a method wherein the first electronic resource is processed by the first client computer to render a web page on a display device of the first client computer (¶ 0010).

28. As to claim 32, McNeely teaches a method wherein the reference tag is formatted as an href tag (¶¶ 0045-0047).

29. Claims 33-39 and 55-56 recite the same limitations as claims 21-26, therefore claims 33-39 and 55-56 are rejected under the same rationale.

30. As to claim 40, McNeely teaches a system for abstracting links to electronic resources in a network environment, the system comprising:

an index file comprising a plurality of link identifiers associated with electronic resources maintained within the network environment, wherein the index file relates each of the link identifiers to an entry of address information specifying a unique location within the network environment on which each of the electronic resources are stored (¶¶ 0030-0031); and

a processing module operable to retrieve from storage a first electronic resource and extract therefrom a link identifier associated with a network location on which an electronic resource referenced in the first electronic resource is stored, the processing module referencing

the index file with the link identifier to identify a unique address corresponding to the network storage location of the referenced electronic resource (§§ 0030-0035).

31. As to claim 41, McNeely teaches a system further comprising: a data structure referenced by the index and storing each of the address information entries in connection with an index pointer specified in the index to relate to each of the plurality of link identifiers (§§ 0030-0031).

32. As to claim 42, McNeely teaches a system further comprising:  
a link source file in which each of the plurality of link identifiers and associated address information entries are declared by an electronic resource developer and a compiler for compiling the link source file to yield the index file and the data structure (§§ 0030-0031, 0036-0041).

33. As to claim 43, McNeely teaches a system wherein each entry of address information associated with one of the plurality of link identifiers comprises a service class identifying one of a plurality of server computers addressed by one of a plurality of domain names in the network environment (§§ 0036-0041, 0045-0048).

34. As to claim 44, McNeely teaches a system wherein each entry of address information associated with one of the plurality of link identifiers further comprises a directory path corresponding to a specific location on one of the plurality of server computers addressed by one of a plurality of domain names in the network environment (§§ 0036-0041, 0045-0048).

35. As to claim 45, McNeely teaches a system wherein the unique address for the referenced electronic resource comprises one of the plurality of domain names and the directory path to a specific location on the server computer addressed by the domain name.

36. As to claim 46, McNeely teaches a system wherein at least one of the entries of address information further comprises a query string of search parameters.

37. As to claim 47, McNeely teaches a system further comprising:  
a configuration module operable for analyzing the service class included in each of the address information entries to render a specific domain name associated therewith (¶¶ 0036-0041, 0045-0048).

38. As to claim 48, McNeely teaches a system wherein the configuration module is a text file relating each service class included in an address information entry to the specific domain name associated therewith (¶ 0030).

39. As to claim 49, McNeely teaches a system wherein the configuration module is an Extensible Markup Language (XML) file relating each service class included in an address information entry to the specific domain name associated therewith (¶ 0021).

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40. As to claim 50, McNeely teaches a system wherein the first electronic resource comprises machine-readable instructions for rendering an electronic document (§§ 0030-0031).

41. As to claim 51, McNeely teaches a system wherein the electronic document is a webpage (§ 0010).

42. As to claim 52, McNeely teaches a system wherein the network environment comprises the Internet (§ 0010).

### ***Conclusion***

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul H. Kang whose telephone number is (571) 272-3882. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul H Kang/  
Primary Examiner  
Art Unit 2144